Storage Tanks

CUSTOM-LINE FACTORY JACKETED AND INSULATED STORAGE TANKS

MODELS TJV AND TJH

Large volume tanks are designed for storing potable water. Fitting locations of these custom-line tanks match the needs of normal installations plus those for the A. O. Smith Cer-Temp® 80 and Shure-Temp™ systems.

FEATURES

STANDARD SIZES FROM 140 TO 1,000 GALLONS A. O. Smith stocks vertical factory jacketed and insulated tanks from 140 gallons up to 1,000 gallons for fast delivery and retrofit applications. All stock tanks are glasslined with standard tank openings as shown on following pages. For custom or larger capacities, see our custom line tanks or consult your factory representatives.

ASME CODE CONSTRUCTION - All tanks are constructed to the requirements of the ASME. ASME code tanks are available in 100, 125, 150 and 160 psi working pressures (125 psi working pressure - standard). Consult factory for ASME code tanks with greater or lesser working pressures, with special configurations or materials.

INSULATION - Entire tank is surrounded with high density fiber glass insulation to reduce costly heat loss; non-sagging and vermin-proof. To meet ASHRAE 90.1 (current edition) depth of insulation cavity requires use of remote bulb-type tank temperature control and thermometer. Storage tanks meet R12.5 minimum thermal insulation requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1.

CABINET - Heavy gauge steel with high quality powder coat paint provides additional insulating qualities for greater energy savings.

LININGS AND COATINGS - Each lining and coating has particular capabilities and limitations. Please consult the factory for recommendations on the uses of linings for specific applications. Thorough investigation on the service life of steel tanks with protective coatings or linings has led to the recommendations of the following linings:

- Glasslined (Standard) - These are normally stocked tanks for water storage up to 180 F, with glass lining to prevent corrosion and addition of rust to water. The glass lining was developed over many years of ceramic research for a wide variety of conditions.
- Cement - A special formulation of cement provides excellent corrosion protection. Available on 200 gallon and larger sizes. A manhole or handhole is included for application of cement lining.
- Epoxy - The application of specially formulated epoxy makes this lining suitable for cold or hot water storage. A manhole or handhole is included for application of epoxy lining. Available on 200 gallon and larger sizes.

CATHODIC PROTECTION - Glasslined, cement and epoxy tanks are furnished with anodes designed for maximum protection.

ACCESSORIES - Tanks will be supplied with the fittings located as indicated on the drawings unless specified otherwise. A manhole or handhole is included on cement or epoxy tanks. A manhole or handhole is optional on glasslined tanks.

ASME

OPTIONAL

CRN

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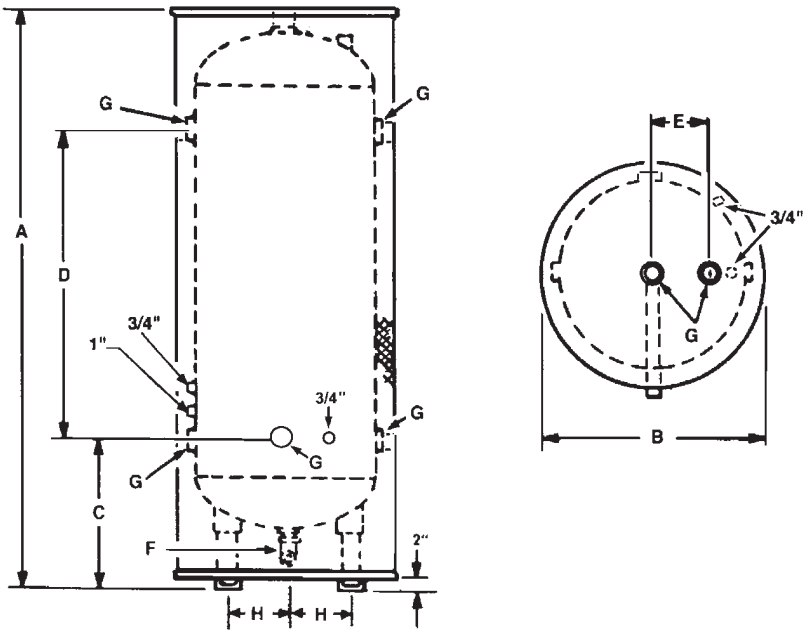
STORAGE TANK SELECTION



TJV-140 THRU TJV-1000
FIGURE 1.

NOTE: Inspection openings, i.e., handholes and manholes, are optional and are to be included with glasslined tanks only when specified. Tanks so equipped are f.o.b. Seattle.

Other tanks to 66" diameter and 3500 gallon are available on special order.

All openings Female Pipe Thread except as noted.

"F" opening Male Pipe Thread.

MODEL AND GALLON CAPACITY	A	B	C	D	E	F	G	H
TJV-140	87	30	21 1/2	51	8	1 1/2	2 1/2	6 3/8
TJV-200	83	36	22	45	10	1 1/2	2 1/2	7 3/4
TJV-250	96	36	22	58	10	1 1/2	2 1/2	7 3/4
TJV-350	97	42	24 1/2	54	14	1 1/2	2 1/2	9 1/2
TJV-400	105	42	24 1/2	61	14	1 1/2	2 1/2	9 1/2
TJVT-500	100	48	27	52	16	1 1/2	3	11 5/16
TJV-500	84	54	27 3/4	33 1/4	18	1 1/2	3	12 3/4
TJV-750	116	54	27 3/4	65 1/2	18	1 1/2	3	12 3/4
TJV-1000	150	54	27 3/4	97 1/2	18	1 1/2	3	12 3/4

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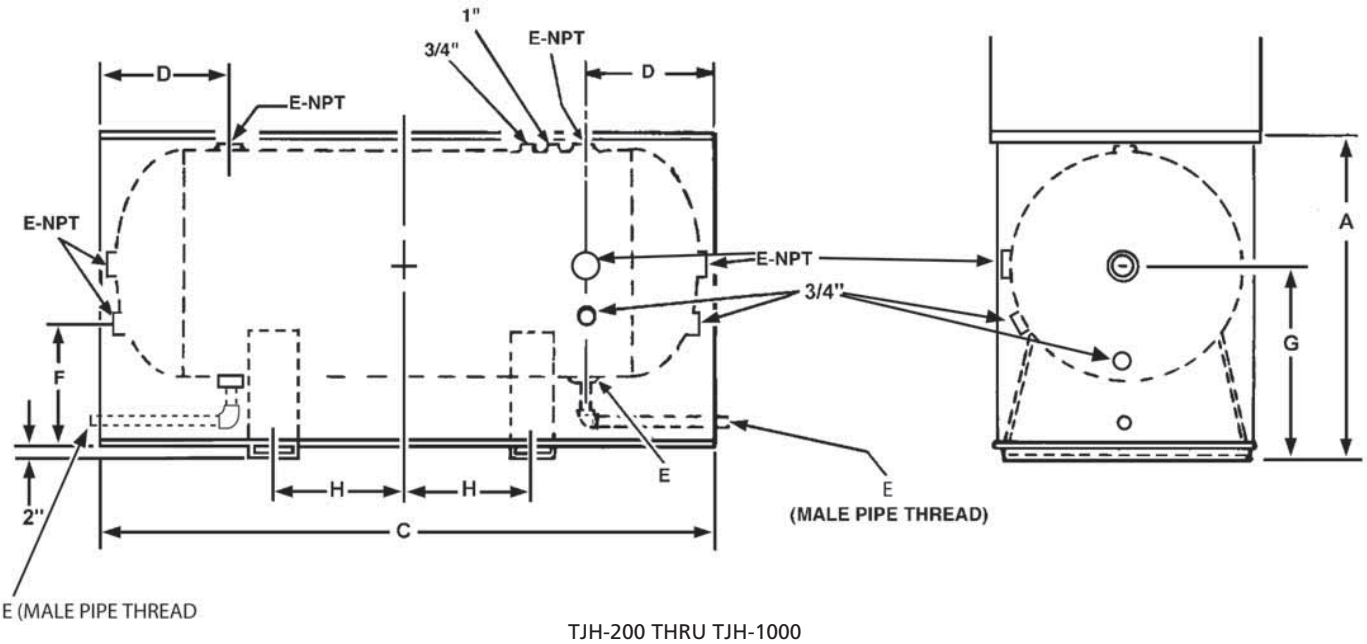
STORAGE TANK SELECTION



TJH-200 THRU TJH-1000
FIGURE 2.

NOTE: Inspection openings, i.e., handholes and manholes, are optional and are to be included with glasslined tanks only when specified. Tanks so equipped are f.o.b. Seattle.

Other tanks to 66" diameter and 3500 gallon are available on special order.

All openings Female Pipe Thread except as noted.

MODEL AND GALLON CAPACITY	A	B	C	D	E	F	G	H
TJH-200	41	36	77	16	2 1/2	11	23	16
TJH-250	41	36	90	16	2 1/2	11	23	22-1/2
TJH-350	47	42	93	17 1/2	2 1/2	10	26	22 1/2
TJH-400	47	42	99	17 1/2	2 1/2	10	26	26
TJHT-500	53	48	94	21	3	11	29	19 1/2
TJH-500	59	54	79	22 3/4	3	12	32	11
TJH-750	59	54	111	22 3/4	3	12	32	27
TJH-1000	59	54	143	22 3/4	3	11	32	43

OPTIONAL

- Handle or 11" x 16" manholes
- Additional openings

CAUTION

All openings are shipped open and unused. Openings must be plugged or capped at time of installation except as noted.

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LIMITED WARRANTY OUTLINES

GLASSLINED, CEMENT, EPOXY: If the tank should leak anytime during the first five years, under the terms of the warranty, A. O. Smith will repair or replace the tank; installation, labor and handling extra.

BLACK STEEL: If the tank should leak on installation, under the terms of the warranty, A. O. Smith will repair or replace the tank; installation, labor and handling extra.

NOTE: THIS OUTLINE IS NOT A WARRANTY. For complete information, consult the written warranty or A. O. Smith Water Products Company. Warranty does not apply to product installed outside of the United States of America or its territorial possessions and Canada.

SUGGESTED SPECIFICATION

SAMPLE SPECIFICATION FOR CUSTOM-LINE STORAGE TANKS

When jacketed or insulated these models meet R12.5 minimum thermal insulation requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1.

ASME storage tank to be A. O. Smith Custom-Line model _____. Capacity to be _____gallons with a diameter of _____ inches. Tank(s) shall be constructed and stamped according to ASME specifications for _____ psi working pressure. Manhole (11 x 15), handhole (4x6) or inspection openings (2-2″) shall be installed in accordance with ASME code requirements and manufacturer(s) standard practice. Tank to be constructed of (carbon steel) _____. Lining shall be (glass, epoxy, cement) _____. Tank(s) lined with (glass, cement, epoxy) _____lining shall be equipped with the number and size of magnesium anode rod(s) sufficient to provide adequate protection for the tank lining. Tank shall be (vertical, horizontal) _____ design and provided with (four) _____ (angle iron legs, threaded leg socket(s)) _____ ring base, _____ saddles.

SAMPLE SPECIFICATION FOR TANK HEATERS

Tank heaters shall be Model No. _____ 3/4″ OD 20 gauge copper "U" tubes. Heater to have _____ square feet of heating surface to heat _____ gallons per hour from _____ degrees F to _____ degrees F with heating media of _____psi steam (or _____ degrees F boiler water). The element shall be constructed so that the entire section can be removed from the tank for cleaning and inspection.

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